SECTION 10605

WIRE MESH PARTITIONS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Heavy-duty wire mesh partitions.

B. Related Sections:
   1. Division 8 Section "Door Hardware" for lock cylinders and keying.

1.2 DEFINITIONS

A. The types of weaves for the wire mesh specified in this Section are as illustrated and defined in ASTM E 437 and its Appendix X4.2:
   1. Intercrimped: Similar to plain weave with extra crimps between the intersections.

1.3 SUBMITTALS

A. Product Data for each type of product specified, consisting of manufacturer's specification, technical data, and installation instructions.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: Engage a firm experienced in manufacturing wire mesh partitions similar to those indicated for this Project and that have a record of successful in-service performance.

1.5 PROJECT CONDITIONS

A. Field Measurements: Check actual locations for wire mesh products by accurate field measurements before fabrication and show recorded measurements on Shop Drawings. Coordinate fabrication and delivery schedules with construction progress to avoid delaying the Work.
   1. Where field measurements cannot be made without delaying the Work, guarantee location dimensions and proceed with fabricating wire mesh products without field measurements. Coordinate wall, column, floor, and ceiling construction to ensure that actual location dimensions correspond to guaranteed dimensions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Acorn Wire and Iron Works, Inc.
   2. Kentucky Metal Products Co.
   3. Miller Wire Works, Inc.

2.2 MATERIALS

A. Steel Wire: ASTM A 853.

B. Steel Channels, Angles, Plates, and Bars: ASTM A 36.

C. Cold-Rolled Steel Channels: Formed from steel sheet.

D. Galvanized Steel Wire: ASTM A 641.

2.3 HEAVY-DUTY MESH PARTITIONS

A. Mesh: 0.192-inch- diameter, intercrimped steel wire woven into 2-inch diamond mesh, securely clinched to frame members.

B. Frames: Provide cutouts for pipes, ducts, beams, and other items shown or necessary for partition installation. Finish edges of cutouts to provide a neat, protective edge.
   1. Frame Members: 1-1/2-by-3/4-inch cold-rolled steel channels with 3/8-inch- diameter bolt holes approximately 18 inches o.c.
   2. Horizontal Reinforcing Members: 1-1/2-by-3/4-by-1/8-inch cold-rolled steel channels with wire woven through or two 1-by-1/2-inch steel channels bolted or riveted toe to toe through mesh, and secured to vertical members. Provide number of horizontal reinforcing members to suit panel height as recommended by partition manufacturer.

C. Stiffening Bars: Provide flat steel bar stiffener posts between abutting panel frames. Size as recommended by partition manufacturer for partition height required. Increase size of stiffening bars, if required, to maintain partition rigidity.

D. Top Capping Bars: 3-inch by 4.1-lb steel channels, secured to top framing member with 1/4-inch- diameter "U" bolts spaced not more than 28 inches o.c.

E. Corner Posts: 2-by-2-by-1/8-inch steel angles with floor shoe and 3/8-inch- diameter bolt holes to align with bolt holes in vertical frame members.

F. Line Posts: Where partition runs exceed 20 feet without intersecting or connecting to overhead framing, furnish 3-inch by 4.1-lb steel channel line posts with 5-by-18-by-1/4-inch steel base plates located at recommended intervals to ensure partition rigidity and stability.

G. Floor Shoes: Cast metal, sized to suit vertical framing and to provide approximately 3 inches of clear space between finished floor and bottom horizontal frame members. Furnish units with set screws for leveling adjustment.

2.4 DOOR

A. Hinged Door: Door frame of 1-1/2-by-3/4-by-1/8-inch steel channels with 1-1/2-by-1/8-inch flat steel bar cover plates on 3 sides, and 1/8-inch- thick strike bar on lock side. Provide 1-1/2 pairs of 3-1/2-by-3-1/2-inch butt hinges riveted or welded to door and frame, and mortise-type cylinder lock operated by key outside with recessed knob inside. Align bottom of door with bottom of adjacent panels.

B. Cylinders for locks are specified in Division 8 Section "Door Hardware."

2.5 FABRICATION

A. Do not use components less than sizes indicated. Use larger-size components as recommended by partition component manufacturer.

B. Provide bolts, hardware, and accessories for complete installation.

C. Finish: Manufacturer's standard, shop-applied enamel finish. Provide manufacturer's standard finish color.

PART 3 - EXECUTION

3.1 PREPARATION

A. Coordinate and furnish anchorages, setting drawings, diagrams, templates, instructions, and directions for installing anchorages, including concrete inserts, sleeves, anchor bolts, and miscellaneous items having integral anchors embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

3.2 INSTALLATION

A. Erect partitions plumb, rigid, properly aligned, and securely fastened in place, complying with Drawings and manufacturer's recommendations.

B. Provide additional field bracing as shown or necessary for rigid, secure installation. Installer to provide additional clips and bracing as required.

3.3 ADJUSTING AND CLEANING

A. Adjust moving components for smooth operation without binding.

B. Touch up damaged finish after completing installation using field-applied paint to match color of shop-applied finish.

END OF SECTION 10605